

6/17/05  
10/559954  
JUN Rec'd PCT/PTO 17 JUN 2009

PTO/SB/08a/b (08-03)

Approved for use through 07/31/2006. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/B/PTO				<b>Complete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>				Application Number	Not Yet Assigned
				Filing Date	Concurrently Herewith
				First Named Inventor	Oliver Schmitz
				Art Unit	N/A 1652
				Examiner Name	Not Yet Assigned I. Chowdhury
Sheet	1	of	1	Attorney Docket Number	13195-00006-US

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number-Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
IC	AA	US-2002/0123118	09-05-2002	Allen et al.	

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document Country Code <sup>2</sup> - Number <sup>3</sup> -Kind Code <sup>3</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
IC	BA	CA-2,255,284	06-22-1999	BASF AG	
IC	BB	EP-0 930 367	07-21-1999	BASF AG	See CA 2,255,284

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 801.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

401423

Examiner Signature	/Iqbal Chowdhury/ (02/13/2007)	Date Considered	
-----------------------	--------------------------------	--------------------	--



11/18/05

PTO/SB/08a/b (07-05)

Approved for use through 07/31/2008. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

<b>Substitute for form 1449A/B/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)				<b>Complete if Known</b>	
				Application Number	10/539954
				Filing Date	June 17, 2005
				First Named Inventor	Oliver Schmitz
				Art Unit	N/A 1652
				Examiner Name	Not Yet Assigned I. Chowdhury
Sheet	1	of	1	Attorney Docket Number	13195-00006-US

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>3</sup>
		Country Code <sup>4</sup>	Number-Kind Code <sup>5</sup> (if known)				

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

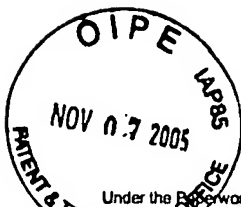
NON PATENT LITERATURE DOCUMENTS					
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			T <sup>2</sup>
IC	CA	DELVECCHIO, V.G., ET AL., "Lysine Decarboxylase [imported] - Brucella melitensis (strain 16M)", February 1, 2002, Accession No. A13438.			
IC	CB	KANEKO, T., ET AL., "B114016 protein", June 1, 2003, Accession No. Q89N26.			
IC	CC	UMBARGER, H.E., "Amino Acid Biosynthesis and Its Regulation", Ann. Rev. Biochem., Vol. 47, 1978, pp. 533-606.			

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature	/Iqbal Chowdhury/ (02/13/2007)	Date Considered	
-----------------------	--------------------------------	--------------------	--

428088



11/7/05

PTO/SB/08a/b (07-05)

Approved for use through 07/31/2006, OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)				<b>Complete If Known</b>	
				Application Number	10/539954
				Filing Date	June 17, 2005
				First Named Inventor	Oliver Schmitz
				Art Unit	N/A 1652
				Examiner Name	Not Yet Assigned I. Chowdhury
Sheet	1	of	3	Attorney Docket Number	13195-00006-US

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
IC	BA	EP-0 066 129 A2	12-08-1982	Ajinomoto Co., Inc.		

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language translation is attached.

NON PATENT LITERATURE DOCUMENTS						
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.				T <sup>2</sup>
IC	CA	SEYMOUR, G. B., ET AL., "Sequence 38 from Patent WO9853085", Nov. 26, 1998, Accession No. A83031.				
	CB	PARKHILL, J., ET AL., "L-allo-threonine aldolase (EC 4.1.2.-) [imported] - Salmonella enterica subsp. enterica serovar Typhi (strain CT18)", Nov. 9, 2001, Accession No. AF0608.				
	CC	GLASER, P., ET AL., "Low specificity L-allo-threonine aldolase homolog lin0333 [imported] - Listeria innocua (strain clip11262)", Nov. 27, 2001, Accession No. AF1474.				
	CD	ADAMS, M. D., ET AL., "RPC11-21H9.TP RPC1-11 Homo sapiens genomic clone RPC1-11-21H9, genomic survey sequence", April 9, 1999, Accession No. B83993.				
	CE	ROUNSLY, S. D., ET AL., "T33N13TF TAMU Arabidopsis thaliana genomic clone T33N13, genomic survey sequence", March 31, 1998, Accession No. B97490.				
	CF	SASAKI, T., ET AL., "Rice panicle at flowering stage Oryza sativa (japonica cultivar-Group) cDNA clone E1236 1A, mRNA sequence", April 4, 2002, Accession No. C72215.				
	CG	MORIO, T., ET AL., "C84060 Dictyostelium discoideum SS (H. Urushihara) Dictyostelium discoideum cDNA clone SSC577, mRNA sequence", April 28, 1999, Accession No. C84060.				
	CH	KOCHER, H. P., ET AL., "Sequence 33 from Patent WO9425606", March 5, 1997, Accession No. A40406.				
	CI	KOHARA, Y. ET AL., "CELK095a3F Yuji Kohara unpublished cDNA Caenorhabditis elegans cDNA clone yk95a3 5', mRNA sequence", Dec. 7, 1995, Accession No. D70033.				
	CJ	MIYA, M., ET AL., "Cyclothone kobayashii 12S rRNA gene, partial sequence", April 8, 2000, Accession No. D84035.				
	CK	YAMANO, Y., ET AL., "Bombyx mori DNA for cecropin A, complete cds.", April 14, 2000, Accession No. D84395.				
	CL	WHITE, O., ET AL., "L-allo-threonine aldolase - Deinococcus radiodurans (strain R1)", Dec. 3, 1999, Accession No. E75410.				
	CM	HEIDELBERG, J.F., ET AL., "L-allo-threonine aldolase VCA0765 [imported] - Vibrio cholerae (strain N16961 serogroup O1)", Aug. 18, 2000, Accession No. E82418.				
IC	CN	CRESPI, M., ET AL., "Hypothetical protein 2 (ipt 3' region) - Rhodococcus fascians plasmid pFID188", Aug. 25, 1995, Accession No. F55578.				

Examiner Signature	/Iqbal Chowdhury/ (02/13/2007)	Date Considered	
-----------------------	--------------------------------	--------------------	--

425562

Substitute for form 1449A/B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		<b>Complete If Known</b>			
		Application Number	10/539954		
		Filing Date	June 17, 2005		
		First Named Inventor	Oliver Schmitz		
		Art Unit	N/A 1652		
		Examiner Name	Not Yet Assigned I. Chowdhury 7		
Sheet	2	of	3	Attorney Docket Number	13195-00006-US

IC	CO	WADE, C. "s208p6395re2. T0 129s1/svlmJ Mus musculus STS genomic, sequence tagged site", Sept. 6, 2002, Accession No. G83533.	
	CP	SOARES, M. B., "Seq2296 Cot250Ft-b4HB3MA Homo sapiens cDNA clone Cot250Ft-b4HB3MA-21 3', mRNA sequence", Aug. 1, 1994, Accession No. T24108.	
	CQ	LEUCHTENBERGER, W., "Amino Acids - Technical Production and Use", Chapter 14a in Biotechnology, eds. Rehm, H.-J., et al., Weinheim, 1996, pp.466-502.	
	CR	MONSCHAU, N., ET AL., "Threonine Aldolase Overexpression plus Threonine Supplementation Enhanced Riboflavin Production in <i>Ashbya gossypii</i> ", Applied and Environmental Microbiology, Vol. 64, No. 11, Nov. 1998, pp. 4283-4290. ✓	
	CS	STRYER, L., "Amino Acid Degradation and the Urea Cycle", Chapter 21 in Biochemistry, 1988, W.H. Freeman and Company, New York, pp. 495-516.	
	CT	STRYER, L., "Biosynthesis of Amino Acids and Heme", Chapter 24 in Biochemistry, 1988, W.H. Freeman and Company, New York, pp. 575-600.	
	CU	Kleemann, A., ET AL., "Amino Acids", in Ullmann's Encyclopedia of Industrial Chemistry, Fifth Ed., Vol. A2, Eds. Gerhartz, W., et al., 1985, VCH: Weinheim, pp. 57-97.	
	CV	UMBARGER, H.E., "Amino Acid Biosynthesis and its Regulation", Ann. Rev. Biochem., Vol. 47, 1978, pp. 533-606.	
	CW	ZEI, M., ET AL., "Antisense Inhibition of Threonine Synthase Leads to High Methionine Content in Transgenic Potato Plants", Plant Physiology, Vol. 127, Nov. 2001, pp. 792-802.	
	CX	QIU, Q., ET AL., "Synthetic construct <i>Pseudomonas aeruginosa</i> clone FLH051184.01F PA0902 gene, partial cds.", July 7, 2004, Accession No. AY659190.	
	CY	SCHULTE, U., ET AL., "Hypothetical protein 7F4.340", June 1, 2003, Accession No. Q871Q6.	
	CZ	ADAMS, M.D., ET AL., "CG10184-PA (LD34157p) <i>Drosophila melanogaster</i> (Fruit fly)", May 1, 2000, Accession No. Q9VCK6.	
	CA1	WING, R.A., ET AL., "Putative lysine decarboxylase-like protein", March 1, 2003, Accession No. Q8H7U8.	
	CB1	LIN, X., ET AL., "L-allo-threonine aldolase, putative", October 1, 2000, Accession No. Q9M835.	
	CC1	XIAO, Y.L., ET AL., "Hypothetical protein At2g37210/T2N18.3.", October 1, 2002, Accession No. Q8L8B8.	
	CD1	IVANOVA, N., ET AL., "Lysine decarboxylase family", June 1, 2003, Accession No. Q815T3.	
	CE1	PAULSEN, I.T., ET AL., "Decarboxylase family protein", June 1, 2003, Accession No. Q839D0.	
	CF1	NELSON, K.E., ET AL., "Hypothetical protein", June 1, 2003, Accession No. Q88DF4.	
	CG1	BRUEGGEMANN, H., ET AL., "L-allo-threonine aldolase (EC 4.1.2.-)", June 1, 2003, Accession No. Q896G8.	
	CH1	KANEKO, T., ET AL., "B114016 protein", June 1, 2003, Accession No. Q89N26.	
	CI1	KANEKO, T., ET AL., "B113794 protein", June 1, 2003, Accession No. Q89NP4.	
	CJ1	XU, J., ET AL., "Putative lysine decarboxylase", June 1, 2003, Accession No. Q8A2T1.	
	CK1	TAKAMI, H., ET AL., "Hypothetical conserved protein", March 1, 2003, Accession No. Q8ETC2.	
	CL1	REN, S.-X., ET AL., "Lysine decarboxylase", March 1, 2003, Accession No. Q8EZ03.	
	CM1	PAULSEN, I.T., ET AL., "Hypothetical protein", March 1, 2003, Accession No. Q8G289.	
	CN1	BABA, T., ET AL., "Hypothetical protein MW0642", October 1, 2002, Accession No. Q8NXQ6.	
	CO1	DA SILVA, A.C.R., ET AL., "Hypothetical Protein XCC1484", October 1, 2002, Accession No. Q8PAJ9.	
	CP1	DA SILVA, A.C.R., ET AL., "Hypothetical protein XAC1532", October 1, 2002, Accession No. Q8PMAO.	
IC	CQ1	BAO, Q., ET AL., "Threonine aldolase", June 1, 2002, Accession No. Q8RCY7.	

Examiner Signature	/Iqbal Chowdhury/ (02/13/2007)	Date Considered	
--------------------	--------------------------------	-----------------	--

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>			<b>Complete If Known</b>		
			Application Number	10/539954	
			Filing Date	June 17, 2005	
			First Named Inventor	Oliver Schmitz	
			Art Unit	N/A- 1652	
			Examiner Name	Not Yet Assigned I. Chowdhury	
Sheet	3	of	3	Attorney Docket Number	13195-00006-US

IC	CR1	KAPATRAL, V., ET AL., "Hypothetical protein FN0535", June 1, 2002, Accession No. Q8RFZ1.	
	CS1	CAPELA, D., ET AL., "Hypothetical protein SMC02544", December 1, 2001, Accession No. Q92R13.	
	CT1	KANEKO, T., ET AL., "M117812 protein", October 1, 2001, Accession No. Q984W8.	
	CU1	BENTLEY, S.D., ET AL., "Hypothetical protein SC03657", November 1, 1999, Accession Q9X8S4.	
	CV1	JIN, Q., ET AL., "Putative arylsulfatase", June 1, 2003, Accession No. Q83S08.	
	CW1	MAKINO, K., ET AL., "L-allo-threonine aldolase", June 1, 2003, Accession No. Q87HF4.	
	CX1	MAKINO, K., ET AL., "Hypothetical protein VP2810", June 1, 2003, Accession No. Q87L10.	
	CY1	ZHANG, Y.-Q., ET AL., "Hypothetical protein SE0450", March 1, 2003, Accession No. Q8CTK0.	
	CZ1	NAKAGAWA, S., "Predicted Rossman fold nucleotide-binding protein", October 1, 2002, Accession No. Q8NN34.	
	CA2	READ, T.D., ET AL., "Hypothetical protein", June 1, 2003, Accession No. Q81XE4.	
	CB2	BUELL, C.R., ET AL., "Threonine aldolase, low-specificity", June 1, 2003, Accession No. Q885J1.	
	CC2	SALANOUBAT, M., ET AL., "Hypothetical protein RSc2087", March 1, 2002, Accession No. Q8XXM6.	
	CD2	POHL, T.M., ET AL., "S. cerevisiae chromosome X reading frame ORF YJL055w", August 11, 1997, Accession No. Z49330.	
	CE2	MARSISCHKY, G., ET AL., "Saccharomyces cerevisiae clone FLH111141.01X YJL055W gene, complete cds.", March 14, 2004, Accession No. AY558247.	
	CF2	WOOD, V., ET AL., "Probable threonine aldolase (EC 4.1.2.5)", October 16, 2001, Accession No. O13940.	
	CG2	LIU, J.-Q., ET AL., "L-allo-threonine aldolase (EC 4.1.2.-) (L-allo-TA) (L-allo-threonine acetaldehyde-lyase)", November 1, 1997, Accession No. O07051.	
	CH2	Cheng, Y.-Q., ET AL., "Alanine racemase TOXG (EC 5.1.1.1)", October 10, 2003, Accession No. Q9UW18.	
IC	CI2	Stover, C.K., ET AL., "Pseudomonas aeruginosa PAO1, section 85 of 529 of the complete genome", February 19, 2003, Accession No. AE004524.	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 509. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature	/Iqbal Chowdhury/ (02/13/2007)	Date Considered	
-----------------------	--------------------------------	--------------------	--